

## BIOGRAPHICAL SKETCH

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Name: James M. Robl

Position Title: President & Chief Scientific Officer  
Hematech, Inc.

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### Education/Training

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Institution and Location	Degree	Year(s)	Field of Study
Kansas State University	B.S.	1977	Biology
Kansas State University	M.S.	1979	Reprod. Phys.
University of Illinois	Ph.D.	1983	Reprod. Phys.
University of Wisconsin	Post-Ph.D.	1985	Develop. Biol.

### Professional Positions:

1977-1979	Research Assistant, Dept. of Animal Science, Kansas State Univ., Manhattan, Kansas
1981-1982	Research Assistant, Dept. of Animal Science, Univ. of Illinois
1980-1981	NIH Fellow, Reproductive Biology, Univ. of Illinois
1982-1983	NIH Fellow, Reproductive Biology, Univ. of Illinois
1983-1985	Research Associate, Dept. of Animal Science, Univ. of Wisconsin
1985-1991	Assistant Professor, Dept. of Veterinary & Animal Sciences, University of Massachusetts
1991-1997	Associate Professor, Dept. of Veterinary & Animal Sciences, University of Massachusetts
1997-2000	Professor, Dept. of Veterinary & Animal Sciences, University of Massachusetts
2000-present	President & C.S.O., Hematech, Inc., Sioux Falls, SD
2001	President, International Embryo Transfer Society

### Commercial Activities:

Co-founder of Advanced Cell Technology, Inc. in 1995

Co-founder of Hematech, Inc. in 1998

Co-founder of Cyagra, LLC in 1998

### Issued U.S. Patents:

Prather, R.S., F. Barnes, J. Robl, N.L. First and V. Simmon. 1991. Multiplying bovine embryos. No. 4,994,384.

Stice, S.L., J. Cibelli, J. Robl, P. Golueke, F. Abel Ponce de Leon, J. Jerry. 1999. Cloning using donor nuclei from proliferating somatic cells. No. 5,945,577.

Stice, S.L., J. Cibelli, J. Robl, P. Golueke, F. Abel Ponce de Leon and D. J. Jerry. 1999. Production of chimeric bovine or porcine animals using cultured inner cell mass cells. No. 5,994,619

- Ponce de Leon, F.A., C. Blackwell, G.X. Ying, J.M. Robl, S.L. Stice and D.J. Jerry. 2000. Prolonged culturing of avian primordial germ cells (PGCs) using specific growth factors, use thereof to produce chimeric avians. No. 6,156,569
- Stice, S.L., J. Cibelli, J. Robl, P. Golueke, F. Abel Ponce de Leon and D. J. Jerry. 2001. Cloning using donor nuclei from non-quiescent somatic cells. No. 6,215,041
- Stice, S.L., J. Robl, J. Cibelli, P. Golueke. 2001. Cloning pigs using donor nuclei from non-quiescent differentiated cells. No. 6,235,969
- Stice, S.L., J. Cibelli, J. Robl, P. Golueke, F. Abel Ponce de Leon and D. J. Jerry. 2001. CICM cells and non-human mammalian embryos prepared by nuclear transfer of a proliferating differentiated cell or its nucleus. No. 6,235,970
- Robl, J.M., R.A. Goldsby, S.E. Ferguson, Y. Kuroiwa, K. Tomizuka, I. Ishida and B.A. Osborne. 2006. Transgenic bovine comprising human immunoglobulin loci and producing human immunoglobulin. No. 7,074,983

**Books:**

Monastersky, G.M. and J.M. Robl. 1995. Strategies in Transgenic Animal Science. American Society for Microbiology Press, Washington, D.C.

**Publications: (abbreviated list)**

- Pinto-Correia, C., Poccia, D.L., Chang, T. and J.M. Robl. 1994. Dephosphorylation of sperm midpiece antigens initiates aster formation in rabbit oocytes. Proc. Natl. Acad. Sci. USA 91: 7894-7898.
- Fissore, R.A. and J.M. Robl. 1994. Mechanism of calcium oscillations in fertilized rabbits eggs. Devel. Biol. 166: 634-642.
- Ponce de Leon, F. A., S. Ambady, S.M. Kappes, G.A. Hawkins, M.D. Bishop, C.W. Beattie and J.M. Robl. 1996. Cattle, sheep and goat X-chromosome segment homologies assessed by chromosome painting: development of a bovine Xq linkage group. Proc. Natl. Acad. Sci. USA 93:3450-3454.
- Zwada, M.W., J.B. Cibelli, P.K. Choi, E.D. Clarkson, P. J. Golueke, S.E. Witta, K.P. Bell, J. Kane, F.A. Ponce de Leon, D.J. Jerry, J.M. Robl, C.R. Freed and S.L. Stice. 1998. Somatic cell cloning-produced transgenic bovine neurons for transplantation in Parkinsonian rats. Nature Medicine 4:569-574.
- Cibelli, J.B., S.S. Stice, P.J. Golueke, J.J. Kane, J. Jerry, C. Blackwell, F.A. Ponce de Leon and J.M. Robl. 1998. Cloned transgenic calves produced from non-quiescent fetal fibroblasts. Science 280:1256-1258.

- Cibelli, J.B., S.S. Stice, P.J. Golueke, J.J. Kane, J. Jerry, C. Blackwell, F.A. Ponce de Leon and J.M. Robl. 1998. Transgenic bovine chimeric offspring produced from somatic cell-derived stem-like cells. *Nature Biotechnology* 16: 642-646.
- Robl, J.M. 1999. New life for sperm-mediated transgenesis? *Nature Biotechnology* 17: 636-637.
- Poothapillai, K., J.G. Knott, P.N. Moreira, A.S. Burnside, D.J. Jerry and J.M. Robl. 2001. Effect of fibroblast donor cell age and cell cycle on development of bovine nuclear transfer embryos in vitro. *Biol. Reprod.* 64: 1487-1493.
- Poothapillai, K., J.G. Knott, Z. Wang, D.J. Jerry and J.M. Robl. 2001. Production of calves from G1 fibroblasts. *Nature Biotechnology* 19: 1176-1178.
- Landsverk, H.B., A.-M. Hakelien, T. Küntziger, J.M. Robl, B.S. Skålhegg, and P. Collas. 2002. Reprogrammed gene expression in a somatic cell-free extract. *EMBO* 31:384-389.
- Hakelien, A.-M., H.B. Landsverk, J.M. Robl, B.S. Skålhegg and P. Collas. 2002. Reprogramming fibroblasts to express T-cell functions using cell extracts. *Nature Biotechnology* 20: 460-466.
- Kuriowa Y., P. Kasinathan, Y.J. Choi, R. Naeem, K. Tomizuka, E.J. Sullivan, J.G. Knott, A. Duteau, R.A. Goldsby, B.A. Osborne, I. Ishida and J. M. Robl. 2002. Cloned transchromosomal calves producing human immunoglobulin. *Nature Biotechnology* 20:889-894.
- Morreira, P.N., J.M. Robl and P. Collas. 2003. Architectural defects in pronuclei of mouse nuclear transplant embryos. *J. Cell Sci.* 116: 3713-3720.
- Sullivan, E.J. S. Kasinathan, P. Kasinathan, J.M. Robl and P. Collas. 2004. Cloned calves from chromatin remodeled in vitro. *Biol. Reprod.* 70: 146-153.
- Kuriowa Y., P. Kasinathan, H. Matsushita, J. Sathiyaseelan, E.J. Sullivan, M. Kakitani, K. Tomizuka, I. Ishida and J. M. Robl. 2004. Sequential targeting of the genes encoding immunoglobin- $\mu$  and prion protein in cattle. *Nature Genetics* 36:775-780.
- Richt J.A., P. Kasinathan, A.N. Hamir, J. Castilla, T. Sathiyaseelan, F. Vargas, J. Sathiyaseelan, H. Wu, H. Matsushita, J. Koster, S. Kato, I. Ishida, C. Soto, J.M. Robl, Y. Kuroiwa. 2007. Production of cattle lacking prion protein. *Nature Biotechnology* 25:132-138.